Date: March 6, 2014

To: Chairman Thomas Wheeler
Commissioner Mignon Clyburn
Commissioner Jessica Rosenworcel
Commissioner Ajit Pai
Commissioner Michael O'Rielly
Jonathan Chambers

Subject: WC Docket No. 10-90: Expression of Interest

From: Tom West TW (dlj)

Representing North Bay-North Coast Broadband Consortium (NBNCBC)- Marin County, Mendocino County, Napa County and Sonoma County in California

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This letter is an "Expression of Interest" on behalf of our northern California four-county region, in collaboration with community-based broadband advisory groups, in the Connect America Fund (CAF) and how it can facilitate the deployment of much-needed broadband infrastructure to our region. While we are not the entity that plans to propose an experimental project(s) for our region, we are working to find qualified providers who will. An examination of the FCC database indicates there may be one entity proposing a project in one of our counties. We are not sure if this proposal will address our priority needs. Therefore, we ask that you consider this letter as a placeholder.

We welcome the FCC's Rural Broadband Trials Experiments and concur with Chairman Wheeler's statement of need for these experiments in the deployment of IP connected networks (p. 104, chairman Wheeler's letter): *...I believe that such voluntary experiments, through the use of carefully-constructed control groups, can tell us how IP networks impact users – and this is the only purpose of these experiments. How will households reach 911,* ***which they must?*** *How will small businesses continue to reach their customers,* ***which they must****? Will competition be maintained? How will people with medical monitoring devices or home alarms know that they will always be connected to a reliable network, which they also* ***must be able to do****?*

We are hopeful such experimental projects will provide evidence of the magnitude of need throughout rural America and offer quality technology solutions that can be utilized to help accomplish and preserve the statutory goals codified by Congress; namely, public safety, ubiquitous and affordable access, competition and consumer protection.

We appreciate FCC's commitment to preserving these statutory goals, especially to universal access, and applaud Chairman Wheeler for stating in his letter (p. 37, section 102, FCC 14-4) *"We take seriously our fundamental obligation to preserve and advance universal service",* because it will take a serious commitment by FCC and everyone involved to do just that, due to the complex challenges to providing universal broadband access in high-cost, low density areas such as our four-county region. We believe these challenges ***(SEE BELOW)*** go beyond the

transition of Infrastructure technologies and need to be addressed in the same fashion by the FCC and the CPUC for California.

Who are We and What are We Doing About Broadband In Our Region?

The four counties have taken on the issue of broadband because of its vital importance to our economies, and we have seen first-hand how substandard or lack of broadband has negatively affected our residents, businesses and anchor institutions. The county boards have partnered with local grassroots broadband advisory groups who have been working intensively to understand the deployment challenges related to low-density population, topography challenges, and know where aggregated demand need areas are located.

Our four counties have a great deal in common economically, politically, tourists, and agriculture. They also share hundreds of miles in borders with each other. It makes solid business sense for the four counties to work collaboratively to address our regional broadband needs. These four counties constitute 4.07% of California's area, but contain only 2.58% of its population. Table 1.0 provides additional demographic information.

Lack of population density ***and*** the challenges to broadband deployment, such as, mountains, valleys, trees and fog have led the major broadband service providers to reject comprehensive fiber-based broadband deployment throughout this region. It is oftentimes only the more urbanized population centers that are fully served, leaving many of the rural areas with substandard broadband access.

The four counties have joined together as the most cost-effective and efficient method to address this pressing matter. By joining forces we are sharing our knowledge, skills, and resources to ensure that our plans provide the capacity, access, diversity and network stability that will be needed for the long-term future. As the **North Bay North Coast Broadband Consortium (NBNCBC),** we presently have a grant application before the California Public Utilities Commission (CPUC) to enable us to launch this planning and deployment effort.

The overarching goals for this endeavor are to complete the development of community-based "last mile" plans for communities in each county starting with unserved and underserved communities; compile these community plans into a comprehensive countywide broadband plan for each county; integrate these county plans into an overall North Bay-North Coast Regional Broadband Plan; set the stage to pursue implementation of projects to meet the priority demands in each county and the region; identify potential deployment funding sources; work with service providers to make use of funding sources to deploy broadband; and develop and implement meaningful adoption programs.

We are obviously not telecom professionals with expertise and certifications to provide broadband service ourselves; but we are committed to our job to serve the public interests and we are highly motivated and willing to work with any interested providers, whether they are incumbents or new entrants, who are willing and able to meet the broadband needs of our counties. The need that is looming large before us is for reliable, affordable, and universal broadband.

Our View of the Challenges to Achieving Universal Broadband Access in Rural America

For the past three years two community-based advisory groups, Broadband Alliance of Mendocino County (BAMC) and Access Sonoma Broadband (ASB), collaborated closely at the grass roots level to coordinate their strategic broadband planning efforts and to facilitate the development of projects in both counties. Together, they developed the Route 1 Corridor Project (R1CP), designed to bring fiber-based broadband access to communities in the western part of both counties. As a result of this collaboration they were able to engage a new provider to submit a grant application for California Advanced Service Fund (CASF) for Infrastructure Program Funds. Unfortunately, the Route 1 Corridor Project was not funded as part of CASF's last round of broadband deployment funding. We believe this case illustrates the challenges such endeavors face in deploying needed broadband access in rural areas.

Based on our experiences to date, the following highlights some challenges we believe need to be addressed and resolved to achieve the goal of universal broadband access by all citizens throughout the nation.

1. **Providers Willingness to Disclose Their Plans and Commitments to Deploy Broadband into Rural Areas**
    - Over the past century we have relied on and fostered a combination of national communications corporations and local telecommunications providers to plan, deploy and manage the communications infrastructure and voice services we have received
    - Prior to and after the divesture of the Bell system in 1983 and over the next two decades we continued to rely on these telecommunications providers to bring us the new communications infrastructure technologies and expanded voice, video and data service capabilities
    - With the advent of fiber capabilities the major national providers initially concentrated on deploying long-haul fiber between the NFL cities and then to secondary urban markets
    - Other providers, many new entrants, began to deploy fiber within metropolitan communities and cable companies began to exploit their coaxial plants to enter the data transmission arena
    - **Between 2005-2008 it was becoming more evident that not much was happening in rural America to deploy new fiber-based infrastructure to replace copper and to expand communications services**
    - As a result of launching the 'broadband stimulus', BTOP, and NTIA programs, as part of the American Recovery and Reinvestment Act of 2009 (ARRA), BAMC and ASB were formed to promote and facilitate incumbent providers as well as new entrants to deploy fiber-based completed with wireless broadband

infrastructure throughout these two counties and to other parts of rural northern California

- **Most Incumbents have been unwilling to share their future plans nor are willing to indicate whether or not they plan to continue to provide current or expanded services to their existing customer bases in our counties**
- Nor are most incumbents open to working with other providers in a joint venture to address the rural needs for both middle-mile and last mile infrastructure
- New entrants are quick to tell us they could not make a business case to enter our geographic areas given the high cost of deployment and potential of the incumbents to undercut prices
- Thus, as counties we have been left in limbo not knowing if our broadband needs will be met by the incumbents and not able to entice new entrants

What is Needed:

- Incumbent providers need to disclose whether or not they intend to continue or discontinue to serve their existing rural landline service areas. If they do, are they planning to replace and/or upgrade the infrastructure to meet the future needs of these rural areas. If they plan to withdraw from these markets, what is the timetable so we can begin to work with potential new providers to bring the needed broadband access and services to every household and entity in our counties within a reasonable timeframe.

2. **Alignment of Federal and California Broadband Program Guidelines**
   - It all starts with aligning the Federal and state minimum broadband speed standards: Federal minimum standards are 3Mbps download and 768Kbps upload to a household and California minimum standards are 6 Mbps download and 1.5 Mbps upload to a household. These standards need to be aligned to facilitate effective planning of infrastructure projects, especially for rural areas
   - **After the ARRA program neither the Federal nor California funding programs has provided significant funding for much needed middle-mile infrastructure deployment in rural areas; they seem to favor focusing only on fixing holes**
   - Requirements for eligibility to apply for both CAF and state (in our case CASF) funds should be the same and the processes of gaining eligibility should not become barriers; For instance, CAF requires an ETC before it will fund a project, but this is a very time consuming process in California
   - Guidelines for matching funds by the provider should recognize that deployment and subsequent operations of services in rural areas will not provide the same return on investment (ROI) that the provider would receive in a more urban area
   - Guidelines for other funding programs, the Federal E-rate program and the California Technology Fund (CTF) designed to assistance specific types of anchor institutions, should not become barriers to the deployment of infrastructure throughout the communities in which these anchors are located

What is Needed

- FCC and state (CPUC) must work together to align the guidelines of all these programs in order to optimize the use of the funds from each program to help achieve the goal of universal access to broadband throughout the nation, especially rural America

3. **Reliability and Validity of Provider Reported Data for State and Federal Mapping**
   - Download and upload speed data for state and Federal mapping are self-reported by the providers
   - These data represent provider advertised speeds and coverage.
   - In California, especially in rural northern California, the speeds reported by many providers increased from reporting round to the next reporting round to coincide or exceed the new California minimums that had been set; in many instances it was not apparent that any upgrades had been made by the providers in capacity or capabilities
   - Citizens in communities and neighborhoods have reported they do not have access to level of services reported by the providers
   - The CPUC has instituted a limited testing and verification process
   - Given that most of the burden is placed on the users (or advisory groups) to prove or disprove the provider reported data causes questions to be raised about the reliability and validity of the data and mapping and their use in making federal and state policy decisions

What is Needed

- As stated in the **National Broadband Plan**, broadband is the great infrastructure challenge of the 21st century. Thus, the FCC and the states need to have in place a mechanisms/processes to assure county government officials, leaders of municipalities and communities and most importantly consumers that the state and federal mapping and data are accurate and reliable for all of us to use for planning and decision-making purposes

In closing, we would like to restate that our counties, community advisory committees and NBNCBC are motivated, willing, and eager to partner with any providers and carriers who can help us deploy broadband in a smart, efficient, and universal manner. We can only hope that these FCC trial broadband experiments are truly an "experiment" in that they can find ways to break out of the "status quo" that has strangled our counties, and finally build the desperately needed infrastructure that we need.

We would be happy to answer any questions you have, provide additional information about our efforts, or meet with FCC representatives. As our liaison with you, we have asked Tom West, the **NBNCBC** Project Manager and the NBNCBC Management Team to be ready to work with you. Here is his contact information:

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NBNCBC Project Manager
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cc: Sonoma County Supervisor Efren Carrillo, Mendocino County Supervisor Dan Hamburg

Napa County Supervisor Brad Wagenknecht, and Marin County Supervisor Steve Kinsey

NBNCBC Management Team-Mike Nicholls, Jim Moorehead, Anthony Halstead, and Peter Pratt

CPUC Commissioner Catherine J. K. Sandoval

Attachment

TABLE 1.0
NORTH BAY-NORTH COAST BROADBAND CONSORTIUM COUNTIES: DEMOGRAPHICS

COUNTY	Land Area (Square Miles)	% of State Land Area (Square Miles)	2010 Census Population	2010-Persons per Square Mile	No. Incorp-orated Places	2010 Population of Incorp-orated Places	No. Census Desig-nated Places	2010 Population of Census Designated Places	2010 Population of the Balance of County	Number of Households (2011)	% of The State Households (2011)	Median Household Income (2011)	% of Persons below Poverty (2011)	% Children on Free or Reduced Lunch (2011/12)	% English Learners (2011/12)	Number of Firms as of 2011	% of State Firms as of 2007
NORTH BAY-NORTH COAST BROADBAND CONSORTIUM																	
MARIN	520	0.33%	252,409	485.1	11	184,982	20	48,976	18,451	102,832	0.83%	$ 89,605	7.2%	24.4%	13.50%	45,449	1.22%
MENDICINO	3,506	2.25%	87,841	25.1	4	28,685	19	15,163	43,993	34,102	0.27%	$ 44,527	17.8%	61.9%	19.50%	10,523	0.28%
NAPA	748	0.48%	136,484	182.4	5	110,271	6	5,859	20,354	49,640	0.40%	$ 68,641	9.8%	44.3%	21.50%	14,810	0.40%
SONOMA	1,576	1.01%	483,878	307.0	9	338,692	28	54,351	90,835	184,170	1.48%	$ 64,343	10.7%	43.4%	22.40%	55,258	1.48%
NBNCBC TOTAL	6,351		960,612	151.3	29	662,630	73	124,349	173,633	370,744						126,040	
% of State		4.07%	2.58%			68.98%		12.94%	18.08%		2.98%						3.37%
STATE	155,959		37,253,956	238.9						12,433,172		$ 61,632	14.4%	55.8%	23.3%	3,736,330	
COUNTRY			308,745,538									$ 52,762	14.3%			29,845,123	

Sources

http://quickfacts.census.gov/qfd/states/06/06041.html
http://quickfacts.census.gov/qfd/states/06000.html
http://www.ed-data.k12.ca.us/App_Resx/EdDataClassic/fsTwoPanel.aspx?#!bottom=/_layouts/EdDataClassic/profile.asp?tab=1&level=05&ReportNumber=16&County=28&fyr=1112